

even though the diaper-changed signal is being transmitted to the diaper-changed signal receiving means.

REMARKS

No claims have been deleted. Claims 69, 212, 237, 254, 255, and 268 have been amended. No new claims have been added. Claims 1-270 remain pending in the application.

Applicant thanks the Examiner for indicating that claims 70, 228-235, 261-267 and 269 are allowable over the prior art of record.

Support

Support for the amendment of claims 212, 237, 254, 255, and 268 requiring the identification signal to be different from the satisfaction signal is inherent from the disclosure provided at page 60, lines 11-18 wherein "*the identification system (not shown) would prevent a satisfaction signal (e.g., rocking of the infant simulator 05) from arresting the demand signal (e.g., rocking-request signal S_5) until an identification signal S^{ID} is received by the identification system (not shown).*"

Objections/Rejections Under 35 U.S.C. § 112

1.0 The Examiner has rejected claim 69 as indefinite for limiting the time interval between the generation of sequential soiled-diaper signals by both a broad range and a narrow range subsumed within the broad range.

Claim 69 has been amended to delete the narrow range.

***Objections/Rejections
Under 35 U.S.C. §§ 102 and 103***

2.0 *The Examiner has rejected claims 47, 50, 52, 208 and 270 as anticipated by Kardon.*

As an initial matter, Applicant notes that this rejection is directed to the Diaper Change Embodiments of the Present Claimed Invention - as exemplified by independent claims 47, 48 and 208 - while rejected claim 208 is NOT directed to the Diaper Change Embodiment, but rather is directed to the Contented Condition Feedback Embodiment of the Present Claimed Invention. Clarification of this rejection as applied to claim 208 is respectfully requested.

***LEGAL REQUIREMENTS
FOR ESTABLISHING ANTICIPATION***

An anticipation rejection under 35 U.S.C. §102 requires that the cited reference(s) disclose each and every element of the claimed invention. *See, Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986); *Kloster Speedsteel AB et al. v. Crucible Inc. et al.*, 230 U.S.P.Q. 81, 84 (Fed. Cir. 1986). Accordingly, the “exclusion of a claimed element from a prior art reference is enough to negate anticipation by that reference.” *Atlas Powder Co. v. E.I. duPont De Nemours & Co.*, 224 U.S.P.Q. 409, 411 (Fed. Cir. 1984).

SUMMARY OF CITED REFERENCE

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is

activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

SUMMARY OF CLAIMED INVENTION

The embodiment of the **Present Claimed Invention** as represented by independent claims 47, from which claims 50⁴⁷ and 52⁴⁷ depend, and 270 (hereinafter "FIRST DIAPER-CHANGE EMBODIMENT"), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for arresting the soiled-diaper signal in response to receipt of a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the soiled-diaper signal arresting means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

The embodiment of the **Present Claimed Invention** as represented by independent claim 48 from which claims 50⁴⁸ and 52⁴⁸ depend (hereinafter "SECOND DIAPER-CHANGE EMBODIMENT"), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for receiving a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (iii) a means for measuring and recording response time measured from initial generation of the perceptible soiled-diaper signal to receipt of the diaper-changed signal, and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the diaper-changed signal receiving means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

*KARDON DOES NOT DISCLOSE
INFANT SIMULATOR REQUIRING FITTING OF DIAPER*

Kardon discloses a doll which stops crying when a wetted diaper is removed. Fitting of a dry diaper upon the doll is not required to end the crying. In sharp contrast, the First and Second Diaper-Change Embodiments of the Present Claimed Invention require the fitting of a diaper upon the doll in order to stop the crying (First Embodiment) and/or end timing of the diaper-change episode and record response time (Second Embodiment). Accordingly, a student caring for the Doll of Kardon is "instructed" by the doll to remove the diaper, while a student caring for the infant simulator of the Present Claimed Invention is "instructed" by the infant simulator to fit a diaper upon the doll.

It is further noted that Kardon does not disclose the additional limitations of (i) a care-provider identification system as set forth in claims 50 and 52, nor (ii) the contented condition feedback system as set forth in claim 208.

3.0 The Examiner has rejected claims 209, 254-256, 259 and 260 as anticipated by Jurmain et al.

*LEGAL REQUIREMENTS
FOR ESTABLISHING ANTICIPATION*

An anticipation rejection under 35 U.S.C. §102 requires that the cited reference(s) disclose each and every element of the claimed invention. See, Hybritech Inc. v. Monoclonal Antibodies, Inc., 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986); Kloster Speedsteel AB et al. v. Crucible Inc. et al., 230 U.S.P.Q. 81, 84 (Fed. Cir. 1986). Accordingly, the "exclusion of a claimed element from a prior art reference is enough to negate anticipation by that reference." Atlas Powder Co. v. E.I. duPont De Nemours & Co., 224 U.S.P.Q. 409, 411 (Fed. Cir. 1984).

3.1 INFANT SIMULATOR WITH
CONTENTED CONDITION FEEDBACK SYSTEM
(CLAIM 209)

SUMMARY OF CITED REFERENCE

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period.

SUMMARY OF CLAIMED INVENTION

The embodiment of the Present Claimed Invention as represented by independent claim 209 (hereinafter "SECOND CONTENTED CONDITION FEEDBACK EMBODIMENT"), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), and (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (iv) a means for measuring and recording response time measured from initial generation of the perceptible demand signal to receipt of the satisfaction signal, and (B) a feedback system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period, provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been

terminated, and the satisfaction signal need no longer be continuously provided to the simulator (e.g., the care provider can remove the key from the keyhole).

*JURMAIN ET AL. DOES NOT DISCLOSE
A CONTENTED CONDITION FEEDBACK SYSTEM*

Jurmain et al. simply does not disclose any form of a contented condition feedback system as set forth in claim 209.

3.2 INFANT SIMULATOR WITH
IDENTIFICATION SYSTEM
(CLAIMS 254-256, 259 AND 260)

SUMMARY OF CITED REFERENCE

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period. The quieting key may include a means for securing the key to an assigned individual.

SUMMARY OF CLAIMED INVENTION

The embodiment of **The Present Claimed Invention** as represented by independent claim 254, from which claims 256²⁵⁴, 259²⁵⁴ and 260²⁵⁴ depend (hereinafter "FIRST IDENTIFICATION SYSTEM EMBODIMENT"), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (e.g., a crying sound), and (ii) a means for arresting the demand signal in response to receipt of a satisfaction signal (e.g., insertion of a key into a keyhole), and (B) a care-provider identification system comprising (i) a means for receiving an identification signal (e.g., keyhole effective for receiving an identification

key attached to the wrist of an assigned care provider by a tamper indicating wristband), and (ii) a means effective for preventing arresting of the demand signal, even though the satisfaction signal has been received by the satisfaction signal arresting means, until the identification signal is received by the identification-signal receiving means.

The embodiment of **The Present Claimed Invention** as represented by independent claim 255, from which claims 256²⁵⁵, 259²⁵⁵ and 260²⁵⁵ depend (hereinafter “SECOND IDENTIFICATION SYSTEM EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (e.g., a crying sound), (ii) a means for receiving a satisfaction signal (e.g., a keyhole for accepting insertion of a key), and (iii) a means for measuring and recording response time measured from initial generation of the perceptible demand signal to receipt of the satisfaction signal, and (B) a care-provider identification system comprising (i) a means for receiving an identification signal (e.g., keyhole effective for receiving an identification key attached to the wrist of an assigned care provider by a tamper indicating wristband), and (ii) a means effective for causing continued measuring of the response time, even though the satisfaction signal has been received by the satisfaction signal arresting means, until the identification signal is received by the identification-signal receiving means.

*JURMAIN ET AL. DOES NOT DISCLOSE
A CARE-PROVIDER IDENTIFICATION SYSTEM*

Jurmain et al. discloses an infant simulator capable of crying at intervals wherein the crying continues until a quieting key is inserted into the infant simulator. Jurmain et al. further discloses that in order to ensure that the individual assigned to care for the infant simulator is the person actually attending to the infant simulator, the quieting key can be secured to the assigned individual (e.g., attached to the wrist of the assigned individual by a tamper indicating wristband). In contrast, the First and Second Identification System Embodiments of the Present Claimed Invention provides an infant simulator wherein both a satisfaction signal (e.g., rocking

of the infant simulator) and an identification signal (e.g., an identification key) must be received by the infant simulator before the crying will end (First Embodiment) and/or timing of response time will be ended and recorded (Second Embodiment).

It is noted that claims 254 and 255 have been amended to clarify that the satisfaction signal and the identification signal are different signals such that the care-provider identification system is: “ ... *effective for preventing arresting of the demand signal, even though the satisfaction signal has been received by the satisfaction signal receiving means, until the identification signal is received by the identification-signal receiving means.* ” (emphasis added). [First Embodiment], and “ ... *causing continued measuring of the duration of a demand episode, even though the satisfaction signal has been received by the satisfaction signal receiving means, unless the identification signal is received by the identification-signal receiving means after generation of the perceptible demand signal has been initiated.* ” (emphasis added) [Second Embodiment].

4.0 The Examiner has rejected claims 48, 49, 53, 58, 60, 61, 210-212, 215-217, 219, 221, 222 and 268 as obvious over *Jurmain et al.* in view of *Kardon*.

*LEGAL REQUIREMENTS FOR ESTABLISHING
PRIMA FACIE CASE OF OBVIOUSNESS*

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, NOT in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See, M.P.E.P. § 2143.

4.1 INFANT SIMULATOR WITH
DIAPER CHANGE SYSTEM
(CLAIMS 48, 49, 53, 58, 60, 61 AND 268)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period. Jurmain et al. describes the crying as a “feeding” or “hunger” signal.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

SUMMARY OF CLAIMED INVENTION

The embodiment of the **Present Claimed Invention** as represented by independent claim 47, from which claims 49⁴⁷, 53, 58⁴⁷, and 60⁴⁷ depend (hereinafter “FIRST DIAPER-CHANGE EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for arresting the soiled-diaper signal in response to receipt of a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the soiled-diaper signal arresting means when fitted on the doll (*e.g.*, a diaper having a

magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

The embodiment of **the Present Claimed Invention** as represented by independent claim 48, from which claims 49⁴⁸, 58⁴⁸, 60⁴⁸, 61 and 268 depend (hereinafter “SECOND DIAPER-CHANGE EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for receiving a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (iii) a means for measuring and recording response time measured from initial generation of the perceptible soiled-diaper signal to receipt of the diaper-changed signal, and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the diaper-changed signal receiving means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

*JURMAIN ET AL. AND KARDON DO NOT
TEACH OR SUGGEST ALL CLAIM LIMITATIONS*

Kardon discloses a doll which stops crying when a wetted diaper is removed. Fitting of a dry diaper upon the doll is not required to end the crying. Jurmain et al. is completely silent as to diapering of the infant simulator. In sharp contrast, the First and Second Diaper-Change Embodiments of the Present Claimed Invention require the fitting of a diaper upon the doll in order to stop the crying (First Embodiment) and/or end timing of the diaper-change episode and record response time (Second Embodiment). Accordingly, a student caring for the Doll of Kardon is “instructed” by the doll to remove the diaper, while a student caring for the infant simulator of the Present Claimed Invention is “instructed” by the infant simulator to fit a diaper upon the doll.

*JURMAIN ET AL. TEACHES AWAY FROM
A DIAPER CHANGE SYSTEM*

A prior art reference must be considered in its entirety (*i.e.*, as a whole) including portions that would lead away from the claimed invention. *See, W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), and M.P.E.P. § 2141.02 [PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS].

Jurmain et al. emphasizes the importance of preventing someone else from caring for the infant simulator and to this end describes attachment of the quieting key to the assigned individual using a tamper indicating bracelet. *See*, column 2, lines 40-46 and column 4, lines 45-48. Since a diaper, “*configured and arranged to be fitted over the lower torso of the doll as a diaper*” cannot readily be attached to an assigned individual as described by Jurmain et al., the Examiner’s proposed substitution of a diaper for the key would defeat one of the features emphasized by Jurmain et al.

4.2 INFANT SIMULATOR WITH
CARE-PROVIDER IDENTIFICATION SYSTEM
(CLAIMS 212, 215, 216 AND 268)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period. The quieting key may include a means for securing the key to an assigned individual.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound

generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

SUMMARY OF CLAIMED INVENTION

The embodiment of **The Present Claimed Invention** as represented by independent claim 254 and emulated by claims 212, 215 and 216 (hereinafter “FIRST IDENTIFICATION SYSTEM EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), and (ii) a means for arresting the demand signal in response to receipt of a satisfaction signal (*e.g.*, insertion of a key into a keyhole), and (B) a care-provider identification system comprising (i) a means for receiving an identification signal (*e.g.*, keyhole effective for receiving an identification key attached to the wrist of an assigned care provider by a tamper indicating wristband), and (ii) a means effective for preventing arresting of the demand signal, even though the satisfaction signal has been received by the satisfaction signal arresting means, until the identification signal is received by the identification-signal receiving means.

The embodiment of **The Present Claimed Invention** as represented by independent claim 255 and emulated by claim 268 (hereinafter “SECOND IDENTIFICATION SYSTEM EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for receiving a satisfaction signal (*e.g.*, a keyhole for accepting insertion of a key), and (iii) a means for measuring and recording response time measured from initial generation of the perceptible demand signal to receipt of the satisfaction signal, and (B) a care-provider identification system comprising (i) a means for receiving an identification signal (*e.g.*, keyhole effective for receiving an identification key attached to the wrist of an assigned care provider by a tamper indicating wristband), and (ii) a means effective for causing continued measuring of the response time, even

though the satisfaction signal has been received by the satisfaction signal arresting means, until the identification signal is received by the identification-signal receiving means.

*JURMAIN ET AL. AND KARDON DO NOT DISCLOSE
A CARE-PROVIDER IDENTIFICATION SYSTEM*

Jurmain et al. discloses an infant simulator capable of crying at intervals wherein the crying continues until a quieting key is inserted into the infant simulator. Jurmain et al. further discloses that in order to ensure that the individual assigned to care for the infant simulator is the person actually attending to the infant simulator, the quieting key can be secured to the assigned individual (e.g., attached to the wrist of the assigned individual by a tamper indicating wristband). Kardon is silent as to any type of an identification system as anyone can remove the diaper from the doll in order to end the crying. In contrast, the First and Second Identification System Embodiments of the Present Claimed Invention provides an infant simulator wherein both a satisfaction signal (e.g., rocking of the infant simulator) and an identification signal (e.g., an identification key) must be received by the infant simulator before the crying will end (First Embodiment) and/or timing of response time will be ended and recorded (Second Embodiment).

It is noted that claims 212 and 268 have been amended to clarify that the satisfaction signal and the identification signal are different signals. such that the care-provider identification system is: “ ... *effective for preventing arresting of the demand signal, even though the satisfaction signal has been received by the satisfaction signal receiving means, until the identification signal is received by the identification-signal receiving means.*” (emphasis added). [First Embodiment], and “ ... *causing continued measuring of the duration of a demand episode, even though the satisfaction signal has been received by the satisfaction signal receiving means, unless the identification signal is received by the identification-signal receiving means after generation of the perceptible demand signal has been initiated.*” (emphasis added) [Second Embodiment].

4.3 INFANT SIMULATOR WITH
CONTENTED CONDITION FEEDBACK SYSTEM
(CLAIMS 210, 211, 212, 215-217, 219, 221 AND 222)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

SUMMARY OF CLAIMED INVENTION

The embodiment of the Present Claimed Invention as represented by Claim 208, from which claims 210²⁰⁸, 211²⁰⁸, 212²⁰⁸, 215²⁰⁸, 216²⁰⁸, 217, 219²⁰⁸, 221²⁰⁸ and 222²⁰⁸ depend (hereinafter "FIRST CONTENTED CONDITION FEEDBACK EMBODIMENT"), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), and (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (B) a feedback

system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been terminated, and the satisfaction signal need no longer be continuously provided to the simulator (*e.g.*, the care provider can remove the key from the keyhole).

The embodiment of the Present Claimed Invention as represented by independent claim 209, from which claims 210²⁰⁹, 211²⁰⁹, 212²⁰⁹, 215²⁰⁹, 216²⁰⁹, 219²⁰⁹, 221²⁰⁹ and 222²⁰⁹ depend (hereinafter “SECOND CONTENTED CONDITION FEEDBACK EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (iv) a means for measuring and recording response time measured from initial generation of the perceptible demand signal to receipt of the satisfaction signal, and (B) a feedback system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period, provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been terminated, and the satisfaction signal need no longer be continuously provided to the simulator (*e.g.*, the care provider can remove the key from the keyhole).

*JURMAIN ET AL. AND KARDON DO NOT DISCLOSE
A CONTENTED CONDITION FEEDBACK SYSTEM*

Neither Jurmain et al. nor Kardon disclose any form of a contented condition feedback system. The infant simulator of Jurmain et al. ends a “crying” period without signaling the care-provider. The doll of Kardon simply stops crying when the wetted diaper is removed, without requiring continued interaction between the doll and a care-provider and without generating any positive feedback at any time.

5.0 The Examiner has rejected claims 54 and 55 as obvious over Jurmain et al. in view of Kardon.

Applicant respectfully submits that claims 54 and 55 are directed to the Second Diaper-Change Embodiment of the Present Claimed Invention, and are patentable over Jurmain et al. and Kardon for the reasons previously set forth in Section 4.1 of this Amendment and Response.

6.0 The Examiner has rejected claims 56, 57, 218, 236, 237, 240-246, 248 and 253 as obvious over Jurmain et al. in view of Kardon and further in view of DeFino et al.

*LEGAL REQUIREMENTS FOR ESTABLISHING
PRIMA FACIE CASE OF OBVIOUSNESS*

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, NOT in applicant’s disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). *See*, M.P.E.P. § 2143.

6.1 INFANT SIMULATOR WITH
DIAPER CHANGE SYSTEM
(CLAIMS 56 AND 57)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period. Jurmain et al. describes the crying as a “feeding” or “hunger” signal.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

DeFino et al. (United States Patent No. 4,160,338) discloses an automobile intruder alarm system having a number of features, including a “warning” feature effective for producing a tone upon entry into the protected automobile through a door for purposes of audibly signaling that the alarm was armed when the automobile was entered and will sound unless disarmed within a defined time period.

SUMMARY OF CLAIMED INVENTION

The embodiment of the **Present Claimed Invention** as represented by independent claim 47, from which claims 56⁴⁷ and 57⁴⁷ depend (hereinafter “FIRST DIAPER-CHANGE EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for arresting the soiled-diaper signal in response to receipt of a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the soiled-diaper signal arresting means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

The embodiment of the **Present Claimed Invention** as represented by independent claim 48, from which claims 56⁴⁸ and 57⁴⁸ depend (hereinafter “SECOND DIAPER-CHANGE EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for receiving a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (iii) a means for measuring and recording response time measured from initial generation of the perceptible soiled-diaper signal to receipt of the diaper-changed signal, and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the diaper-changed signal receiving means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

*JURMAIN ET AL., KARDON AND DEFINO ET AL. DO NOT
TEACH OR SUGGEST CLAIMED INVENTION*

Applicant respectfully submits that claims 56 and 57, directed to the First and Second Diaper-Change Embodiments of the Present Claimed Invention, are allowable over Jurmain et al, Kardon and Defino et al. for the reasons set forth above in Section 4.1 as DeFino et al. is directed to the unrelated art of intruder alarm systems for automobiles and is silent as to a feature requiring the fitting of a diaper upon an infant simulator when requested to do so by the infant simulator.

6.2 INFANT SIMULATOR WITH
CARE-PROVIDER IDENTIFICATION SYSTEM
(CLAIMS 237, 240 AND 241)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period. The quieting key may include a means for securing the key to an assigned individual.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

DeFino et al. (United States Patent No. 4,160,338) discloses an automobile intruder alarm system having a number of different features designed to detect and signal unauthorized

entry into the vehicle, and prevent operation of the vehicle unless the alarm system is disarmed. DeFino et al. further discloses that the alarm system can alternatively be armed in a “remote” or “passive” mode, wherein a “remotely” armed alarm system can be disarmed only by transmitting the proper code to the alarm system using a remote transmitter, and a “passively” armed alarm system can be disarmed only by starting the vehicle with the vehicle key. DeFino et al. still further describes the inclusion of a bypass switch within the vehicle which, when activated after entry of a vehicle protected by a remotely armed alarm system, converts the remotely armed alarm system into a passively armed alarm system so as to allow an owner no longer in possession of his/her remote transmitter to disarm the alarm system with only the vehicle key.

SUMMARY OF CLAIMED INVENTION

The embodiment of **The Present Claimed Invention** as represented by independent claim 254 and emulated by claims 237, 240 and 241 (hereinafter “FIRST IDENTIFICATION SYSTEM EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), and (ii) a means for arresting the demand signal in response to receipt of a satisfaction signal (*e.g.*, insertion of a key into a keyhole), and (B) a care-provider identification system comprising (i) a means for receiving an identification signal (*e.g.*, keyhole effective for receiving an identification key attached to the wrist of an assigned care provider by a tamper indicating wristband), and (ii) a means effective for preventing arresting of the demand signal, even though the satisfaction signal has been received by the satisfaction signal arresting means, until the identification signal is received by the identification-signal receiving means.

*JURMAIN ET AL., KARDON AND DEFINO ET AL. DO NOT
TEACH OR SUGGEST A CARE-PROVIDER IDENTIFICATION SYSTEM*

Applicant respectfully submits that claims 237, 240 and 241, directed to the First Identification System Embodiment of the Present Claimed Invention, are allowable over Jurmain et al, Kardon and Defino et al. for the reasons set forth above in Section 4.2 as DeFino et al. is directed to the unrelated art of intruder alarm systems for automobiles and is silent as to a feature requiring transmission of both an identification signal (“owner identification code”) and a satisfaction signal (“disarm code”) in order to arrest a demand signal (“warning tone or intruder alarm”). It is noted that the signals described by DeFino et al. (*i.e.*, a remotely transmitted code and starting of the vehicle with the ignition key) are alternative signals, not combined signals.

It is noted that claim 237 has been amended to clarify that the satisfaction signal and the identification signal are different signals, such that the care-provider identification system is: “*... effective for preventing arresting of the demand signal, even though the satisfaction signal has been received by the satisfaction signal receiving means, until the identification signal is received by the identification-signal receiving means.*” (emphasis added).

6.3 INFANT SIMULATOR WITH
CONTENTED CONDITION FEEDBACK SYSTEM
(CLAIM 218)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon



the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

DeFino et al. (United States Patent No. 4,160,338) discloses an automobile intruder alarm system for producing a tone upon entry into the automobile through a door for purposes of audibly signaling that the alarm was activated when the automobile was entered and will sound unless deactivated within a defined time period. DeFino et al. further discloses that the system will produce a “chirp” after the system has been armed for purposes of indicating that the system has been successfully armed.

SUMMARY OF CLAIMED INVENTION

The embodiment of the Present Claimed Invention as represented by Claim 208, from which claim 218²⁰⁸ depends (hereinafter “FIRST CONTENTED CONDITION FEEDBACK EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), and (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (B) a feedback system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The



contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been terminated, and the satisfaction signal need no longer be continuously provided to the simulator (*e.g.*, the care provider can remove the key from the keyhole).

The embodiment of the Present Claimed Invention as represented by independent claim 209, from which claim 218²⁰⁹ depends (hereinafter “SECOND CONTENTED CONDITION FEEDBACK EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (iv) a means for measuring and recording response time measured from initial generation of the perceptible demand signal to receipt of the satisfaction signal, and (B) a feedback system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period, provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been terminated, and the satisfaction signal need no longer be continuously provided to the simulator (*e.g.*, the care provider can remove the key from the keyhole).

Applicant respectfully submits that claim 218, directed to the First and Second Contented Condition Feedback Embodiments of the Present Claimed Invention, are allowable over Jurmain et al, Kardon and Defino et al. for the reasons set forth above in Section 4.3 as DeFino et al. is directed to the unrelated art of intruder alarm systems for automobiles and is silent as to a feature which indicates, by generation of a positive signal, the successful completion of a request for continuous interaction with the system for a defined period of time. It is noted that the “chirping” sound generated by the intruder alarm merely indicates successful transmission of an arming or disarming code to the alarm system, and does not indicate the successful completion of a request for *continuous* interaction with the system *for a defined period of time*.

6.4 INFANT SIMULATOR WITH
ESCALATING DEMAND SIGNAL FEATURE
(CLAIMS 236, 242-246, 248 and 253)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

DeFino et al. (United States Patent No. 4,160,338) discloses an automobile intruder alarm system for producing a tone upon entry into the automobile through a door for purposes of audibly signaling that the alarm was armed when the automobile was entered and will sound unless disarmed within a defined time period. DeFino et al. further discloses that the alarm system can increase the frequency or volume of the tone as the amount of time remaining to disarm the alarm decreases.

SUMMARY OF CLAIMED INVENTION

The embodiment of **The Present Claimed Invention** as represented by claim 236, from which claims 242-246, 248 and 253 depend (hereinafter **ESCALATING DEMAND SIGNAL EMBODIMENT**) is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal, and (ii) a means for arresting the demand signal in response to receipt of a satisfaction signal, and (B) a means for escalating the intensity of the demand signal as the duration between generation of the demand signal and receipt of the satisfaction signal increases.

JURMAIN ET AL. AND KARDON
DO NOT DISCLOSE ESCALATING DEMAND SIGNAL FEATURE

As acknowledged by the Examiner, the Jurmain et al. and Kardon references do not teach or suggest escalation of a demand signal (*e.g.*, increasing the intensity of a crying sound).

DEFINO ET AL. IS FROM NONANALOGOUS ART

As discussed in detail in the Amendment and Response filed in reply to the Office Action dated 22 June 1998, DeFino et al. is directed to the field of intruder alarms while the Present

Claimed Invention is directed to infant simulators. The construction, use and function of these two types of products are completely different (e.g., intruder alarms are designed to detect the presence of an intruder and emit a warning signal for purposes of preventing unauthorized entry or use, while infant simulators are designed to require a care-provider to interact with the infant simulator for purposes of simulating the care requirements of an infant and reporting the level of care provided by the care-provider to a program administrator). Due to such differences in the construction and function of such devices, those skilled in the art of designing infant simulators do not look to intruder alarm systems for guidance in the design of an infant simulator. *See*, M.P.E.P.

§2141.01(a). Hence, it is inappropriate to combine DeFino et al. with the other cited references in an effort to achieve the Present Claimed Invention.

*CITED REFERENCES LACK MOTIVATION
TO MODIFY THE PRIOR ART DEVICES
TO ACHIEVE THE PRESENT CLAIMED INVENTION*

In order to determine the propriety of an obviousness rejection, it is necessary to ascertain whether or not the reference motivates one of ordinary skill in the relevant art, having the reference before him, to make the proposed substitution, combination, or other modification. In re Linter, 458 F.2d 1013, 173 U.S.P.Q. 560, 562 (CCPA 1972). Obviousness can only be established where there is some teaching, suggestion or motivation in the prior art or in the knowledge generally available to one of ordinary skill in the art, to combine the references and produce the claimed invention. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992). *See*, M.P.E.P. §2143.01.

As mentioned above, the Jurmain et al. and Kardon references do not teach or suggest escalation of a demand signal, with the Jurmain et al. patent the only reference actually directed to the field of infant simulators. While DeFino et al. teaches escalation of a warning tone, DeFino et al. is directed to use of such a feature in connection with the disarming of an automobile intruder alarm system. There is simply nothing in any of the cited references

motivating one skilled in the art to select the tone escalation feature from DeFino et al. and incorporate that feature into an infant simulator.

Furthermore, it is noted that - absent use of Applicant's disclosure as a blueprint - even a combination of the cited references would not result in the Present Claimed Invention. Indeed, absent use of Applicant's disclosure as a blueprint, a combination of the cited references produces the infant simulator disclosed in Jurmain et al. modified to produce a warning tone prior to initiation of crying for purposes of permitting a care-provider to prevent generation of the crying sound before the demand period is commenced, with the volume and/or frequency of the warning tone increasing as the care period is approached. In contrast, the Escalating Demand Signal Embodiment of the Present Claimed Invention does not even provide a warning tone, but rather commences with the "alarm siren" itself (*i.e.*, crying) and proceeds to escalate the alarm siren (*i.e.*, crying to loud crying to screaming) as time passes without receipt of the appropriate satisfaction signal.

7.0 The Examiner has rejected claims 59, 220, 225-227, 247, 251 and 252 as obvious over Jurmain et al. in view of Kardon and further in view of the NASCO Manual.

*LEGAL REQUIREMENTS FOR ESTABLISHING
PRIMA FACIE CASE OF OBVIOUSNESS*

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, NOT in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). *See*, M.P.E.P. § 2143.

7.1 INFANT SIMULATOR WITH
DIAPER CHANGE SYSTEM
(CLAIM 59)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period. Jurmain et al. describes the crying as a “feeding” or “hunger” signal.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

The NASCO Manual discloses a parenting manikin programmed to periodically cry until an appropriate care key - selected from a set of five different care keys including a diaper key - is inserted into the manikin. The NASCO Manual further discloses that the manikin will coo or burp when the correct care key is inserted, and then coo again several minutes later to indicate the end of the care period and the need to reinsert the same care key to avoid further crying.

SUMMARY OF CLAIMED INVENTION

The embodiment of the **Present Claimed Invention** as represented by independent claim 47, from which claim 59⁴⁷ depends (hereinafter “FIRST DIAPER-CHANGE EMBODIMENT”), is

directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for arresting the soiled-diaper signal in response to receipt of a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the soiled-diaper signal arresting means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

The embodiment of **the Present Claimed Invention** as represented by independent claim 48, from which claim 59⁴⁸ depends (hereinafter “SECOND DIAPER-CHANGE EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a diaper-change system including at least (i) a means for generating a perceptible soiled-diaper signal (*e.g.*, a crying sound), and (ii) a means for receiving a diaper-changed signal (*e.g.*, a magnetic actuated switch), and (iii) a means for measuring and recording response time measured from initial generation of the perceptible soiled-diaper signal to receipt of the diaper-changed signal, and (B) a diaper configured and arranged to be fitted over the lower torso of the doll as a diaper and having a means effective for transmitting the diaper-changed signal to the diaper-changed signal receiving means when fitted on the doll (*e.g.*, a diaper having a magnet attached so as to be properly positioned and oriented to shut off the magnetic actuated switch when the diaper is fitted onto the doll).

*JURMAIN ET AL., KARDON AND THE NASCO MANUAL DO NOT
TEACH OR SUGGEST THE CLAIMED INVENTION*

Applicant respectfully submits that claim 59, directed to the First and Second Diaper-Change Embodiments of the Present Claimed Invention, is allowable over Jurmain et al, Kardon and the NASCO Manual for the reasons set forth above in Section 4.1 as the NASCO Manual

utilizes keys to quiet the parenting manikin, and does NOT teach or suggest an infant simulator requiring the actual fitting of a diaper upon the simulator in order to quiet the simulator.

7.2 INFANT SIMULATOR WITH
CONTENTED CONDITION FEEDBACK SYSTEM
(CLAIMS 220 AND 225-227)

As an initial matter, it is noted that independent claims 208 and 209, from which claims 220 and 225-227 depend, were amended in the Amendment and Response filed in reply to the Office Action dated 22 June 1998 to require continuous receipt of the satisfaction signal during the demand period, and generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period.

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

The **NASCO Manual** discloses a parenting manikin programmed to periodically initiate care periods during which the manikin will cry until an appropriate care key - selected from a set of five different care keys- is inserted into the manikin. The NASCO Manual further discloses that the manikin will coo or burp when the correct care key is inserted, and then coo again several minutes later to indicate the end of the care period and the need to reinsert the same care key to avoid further crying.

SUMMARY OF CLAIMED INVENTION

The embodiment of the Present Claimed Invention as represented by Claim 208, from which claims 220²⁰⁸, 225²⁰⁸, 226²⁰⁸, and 227²⁰⁸ depend (hereinafter “FIRST CONTENTED CONDITION FEEDBACK EMBODIMENT”), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), and (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (B) a feedback system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been terminated, and the satisfaction signal need no longer be continuously provided to the simulator (*e.g.*, the care provider can remove the key from the keyhole).

The embodiment of the Present Claimed Invention as represented by independent claim 209, from which claims 220²⁰⁹, 225²⁰⁹, 226²⁰⁹, and 227²⁰⁹ depend (hereinafter "SECOND CONTENTED CONDITION FEEDBACK EMBODIMENT"), is directed to an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal (*e.g.*, a crying sound), (ii) a means for inhibiting the demand signal in response to receipt of a satisfaction signal so long as the satisfaction signal is continuously received by the demand signal inhibiting means (*e.g.*, holding a key within a keyhole against a biasing means), (iii) a demand duration timer in communication with the demand signal generating means for terminating generation of the demand signal at the end of a demand period, and (iv) a means for measuring and recording response time measured from initial generation of the perceptible demand signal to receipt of the satisfaction signal, and (B) a feedback system including (i) a means for generating a perceptible contented signal (*e.g.*, a cooing sound), and (ii) a means for initiating generation of the contented signal at the end of the demand period provided the satisfaction signal is being received by the demand system at the end of the demand period, provided the satisfaction signal is being received by the demand system at the end of the demand period (*e.g.*, the cooing sound is generated only when the key is detected within the keyhole when the timer signals the end of the demand period). The contented signal thereby functions to indicate to a care provider that the demand period has ended, the demand signal has been terminated, and the satisfaction signal need no longer be continuously provided to the simulator (*e.g.*, the care provider can remove the key from the keyhole).

*JURMAIN ET AL., KARDON AND THE NASCO MANUAL DO NOT
TEACH OR SUGGEST A CONTENTED CONDITION FEEDBACK SYSTEM*

Applicant respectfully submits that claims 220, and 225-227, directed to the First and Second Contented Condition Feedback Embodiments of the Present Claimed Invention, are allowable over Jurmain et al, Kardon and the NASCO Manual for the reasons set forth above in Section 4.3 as the NASCO Manual does not teach or suggest generation of a contented signal at the end of a demand period (*i.e.*, a period during which a satisfaction signal must be continuously

transmitted to the infant simulator in order to quiet the simulator and/or stop timing of response time) for purposes of signaling to the care-provider that the demand period has ended and the satisfaction signal need no longer be continuously provided to the simulator.

For purposes of simplifying a comparison of the parenting manikin described in the NASCO Manual and the Contented Condition Feedback Embodiments of the Present Claimed Invention, the Contented Condition Feedback Embodiment of the Present Claimed Invention can be described in the language of the NASCO Manual as a parenting manikin programmed to (i) periodically cry for a care period unless an appropriate care key is continuously inserted into the manikin throughout the duration of the care period, and (ii) signal the end of the care period (*i.e.*, the ability to withdraw the care key without reinitiating crying) by generating a contented signal when the care key is detected within the manikin at the end of the care period.

The NASCO Manual does NOT disclose the Contented Condition Feedback Embodiment of the Present Claimed Invention. The chronological and functional relationship between generation of the demand signal (*e.g.*, the crying sound), receipt of the satisfaction signal (*e.g.*, insertion of the key into the keyhole) and generation of the contented signal (*e.g.*, the cooing sound) in the parenting manikin described in the NASCO Manual is completely different than that in the Contented Condition Feedback Embodiments of the Present Claimed Invention. The parenting manikin described by the NASCO Manual requests insertion of a care key twice for each care period, with a coo/burp generated after the first insertion to signal insertion of the correct care key, and a coo/burp generated at the end of a care period to signal the care-provider to reinsert the care key to prevent reinitiation of crying. In contrast, the Contented Condition Feedback Embodiment of the Present Claimed Invention is directed to an infant simulator requiring receipt of a satisfaction signal (*e.g.*, insertion of a care key) *continuously* throughout each demand period, with a contented signal generated at the end of the demand period - *provided the satisfaction signal is being received by the infant simulator at the end of the demand period* - for purposes of signaling the care-provider that the demand period has ended and the satisfaction signal need no longer be continuously provided to the simulator.

7.3 INFANT SIMULATOR WITH
ESCALATING DEMAND SIGNAL FEATURE
(CLAIMS 247, 251 and 252)

SUMMARY OF CITED REFERENCES

Jurmain et al. (United States Patent No. 5,443,388) discloses an infant simulator capable of crying at intervals, with the crying continuing until a quieting key is inserted into the infant simulator and continuously held in position against a biasing means for a defined time period.

Kardon (United States Patent No. 3,190,038) discloses a doll having (i) a feeding tube extending from the mouth to a point proximate the posterior of the doll for conveying water introduced into the mouth of the doll to the posterior of the doll so as to wet a diaper fitted upon the doll, (ii) a sensor located proximate the posterior end of the feeding tube capable of being activated when a diaper fitted upon the doll becomes saturated with water, and (iii) a sound generator in communication with the sensor for generating a crying sound when the sensor is activated (*i.e.*, the diaper is wet) and terminating such crying when the sensor is deactivated (*i.e.*, the diaper is removed).

The **NASCO Manual** discloses a parenting manikin programmed to periodically initiate care periods during which the manikin will cry until an appropriate care key - selected from a set of five different care keys- is inserted into the manikin. The NASCO Manual further discloses that the manikin will coo or burp when the correct care key is inserted, and then coo again several minutes later to indicate the end of the care period and the need to reinsert the same care key to avoid further crying.

SUMMARY OF CLAIMED INVENTION

The embodiment of **The Present Claimed Invention** as represented by claim 236, from which claims 247, 251 and 252 depend (hereinafter ESCALATING DEMAND SIGNAL) is directed to

an infant care simulation system for use in an infant care training program, wherein the infant simulator includes (A) a demand system comprising (i) a means for generating a perceptible demand signal, and (ii) a means for arresting the demand signal in response to receipt of a satisfaction signal, and (B) a means for escalating the intensity of the demand signal as the duration between generation of the demand signal and receipt of the satisfaction signal increases.

JURMAIN ET AL., KARDON AND THE NASCO MANUAL
DO NOT DISCLOSE AN ESCALATING DEMAND SIGNAL FEATURE

The Jurmain et al., Kardon and NASCO Manual references simply do NOT teach or suggest escalation of a demand signal (e.g., increasing the intensity of a crying sound).

8.0 The Examiner has rejected claims 62-69, 223, 224, 249 and 250 as obvious over Jurmain et al. in view of Kardon and the NASCO Manual and further in view of administrative notice that those skilled in the art would establish a time interval between sequential diaper-change episodes representative of the diapering requirements of an actual infant.

8.1 INFANT SIMULATOR WITH
DIAPER CHANGE SYSTEM
(CLAIMS 62-69)

Applicant respectfully submits that claims 62-69, directed to the First and Second Diaper-Change Embodiments of the Present Claimed Invention, are allowable over Jurmain et al, Kardon, the NASCO Manual and the administrative notice taken by the Examiner for the reasons set forth above in Section 7.1 as the administrative notice taken by the Examiner does NOT teach or suggest an infant simulator requiring the actual fitting of a diaper upon the simulator in order to quiet the simulator.

8.2 INFANT SIMULATOR WITH
CONTENTED CONDITION FEEDBACK SYSTEM
(CLAIMS 223 AND 224)

Applicant respectfully submits that claims 223 and 224, directed to the First and Second Contented Condition Feedback Embodiments of the Present Claimed Invention, are allowable over Jurmain et al, Kardon, the NASCO Manual and the administrative notice taken by the Examiner for the reasons set forth above in Section 7.2 as the administrative notice taken by the Examiner does not teach or suggest generation of a contented signal at the end of a demand period (*i.e.*, a period during which a satisfaction signal must be continuously transmitted to the infant simulator in order to quiet the simulator and/or stop timing of response time) for purposes of signaling to the care-provider that the demand period has ended and the satisfaction signal need no longer be continuously provided to the simulator.

8.3 INFANT SIMULATOR WITH
ESCALATING DEMAND SIGNAL FEATURE
(CLAIM 249 and 250)

Applicant respectfully submits that claims 249 and 250, directed to the Escalating Demand Signal Embodiment of the Present Claimed Invention, are allowable over Jurmain et al, Kardon, the NASCO Manual and the administrative notice taken by the Examiner for the reasons set forth above in Section 7.3 as the administrative notice taken by the Examiner does not teach or suggest escalation of a signal.

CONCLUSION

Applicant respectfully submits that all pending claims are in condition for allowance.

Respectfully submitted,

Date 24 March 99

By M. Sherrill
Michael S. Sherrill, #32,302
MICHAEL S. SHERRILL LAW OFFICES
4756 Banning Avenue, Suite 200
White Bear Lake, Minnesota 55110-3205
(651) 426-2400